

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A wireless communication system for performing communication within a frequency region divided into a plurality of frequency bands, comprising:

searching means for searching idle frequency bands each including one or more idle reference frequencies which are not used by other wireless communication systems and detecting a main frequency for each of the idle frequency bands;

band allocating means for allocating a frequency band having a predetermined bandwidth and the main frequency of the frequency band to be used by the wireless communication system, the frequency band being selected from among the idle frequency bands detected by said searching means; and

band adjusting means for adjusting the bandwidth to be occupied by the wireless communication system or any of the other wireless communication systems by shifting the main frequency of at least one of occupied bandwidths so as to enlarge the bandwidth of at least one of said idle frequency bands when said band allocating means cannot allocate the frequency band, and causing said band allocating means to perform reallocation of the frequency band.

2. (Currently amended) [[A]] The wireless communication system according to claim 1, wherein

said searching means searches reference frequencies of the frequency bands used by the other wireless communication systems and specifies reference frequencies each remaining in an idle state within said frequency region, and

 said band allocating means allocates the frequency band to be used by the wireless communication system within an idle frequency band composed of a group of the idle state reference frequencies adjacent to each other.

3. (Currently amended) [[A]] The wireless communication system according to claim 1, wherein said searching means determines main frequencies of the frequency bands being used by the other wireless communication systems, inquires about frequency band information on the bands being used by the other wireless communication systems according to each of radio signals at said main frequencies, and specifies reference frequency bands in an idle state based on the frequency band information obtained from the other wireless communication systems.

4. (Currently amended) [[A]] The wireless communication system according to claim 1, wherein said band adjusting means reduces said predetermined bandwidth and performs the allocation of the frequency band to be used by the wireless communication system.

5. (Currently amended) [[A]] The wireless communication system according to claim 4, further comprising means for preliminarily holding plural types of spreading codes with different chip rates in correspondence with occupied bandwidths, wherein

 said band adjusting means performs the allocation of the band reduced by selecting any of said spreading codes.

6. (Cancelled)

7. (Cancelled)

8. (Currently amended) [[A]] The wireless communication system according to claim 1, wherein said band adjusting means determines a main frequency of the frequency band being used by one of the other wireless communication systems, and enlarges the idle frequency bandwidth by requesting said one of the other wireless communication systems by using a radio signal having the main frequency to reduce the bandwidth being in use.

9. (Currently amended) [[A]] The wireless communication system for performing communication within a frequency region divided into a plurality of frequency bands, comprising:

a server radio station connected to a wired LAN for performing wireless communication with a plurality of client terminals by using a frequency band including one or more reference frequencies and mediating communication between the individual client terminals or between each of the client terminals and the wired LAN, said server radio station having a frequency band information memory for storing a plurality of table entries, each of which indicates frequency band information including an occupied bandwidth and a main frequency of radio frequency band[[s]] being used by the wireless communication system and or one of the other wireless communication systems, and an idle band information memory for storing idle band information indicative of the frequency bands which are not used by the other wireless communication systems; and

a server management terminal for controlling allocation of the frequency band to be used occupied by the wireless communication system based on by referring to said frequency band information memory and said idle band information memory,

wherein said server management terminal has band adjusting means for adjusting the bandwidth to be occupied by any of the other wireless communication systems by shifting the main frequency of at least one of occupied bandwidths so as to enlarge the bandwidth of at least one of said idle frequency bands when said frequency band to be allocated is not found in said idle band information memory, thereby to perform reallocation of the frequency band.

10. (Cancelled)

11. (Cancelled)

12. (Currently amended) [[A]] The wireless communication system according to claim 11, wherein said server management terminal has means for designating a communication speed for the wireless communication system and sets the occupied bandwidth of the frequency band to be used by the wireless communication system in accordance with said designated value.

13. (Currently amended) [[A]] The wireless communication system according to claim 11, wherein said server management terminal has means for requesting a server management terminal of any of the adjacent wireless communication systems to change a frequency band being in use when the frequency band cannot be allocated to the wireless communication system, and performs the allocation of the frequency to be used by the wireless communication system based on the frequency band information that has been changed.

14. (Currently amended) [[A]] The wireless communication system according to claim 13, wherein said server management terminal has means for searching a frequency band being used by any of the other adjacent wireless communication systems and allocating the searched frequency band to said server radio station so that the server management terminal performs communication with a server management terminal of the other adjacent wireless communication system.

15. (Currently amended) [[A]] The wireless communication system according to claim 11, wherein said server management terminal has means for correcting the width of the frequency band to be used by the wireless communication system when the frequency band cannot be allocated to the wireless communication system, thereby to perform reallocation of the frequency band to the wireless communication system with the corrected bandwidth.

16. (Currently amended) [[A]] The wireless communication system according to claim 9, wherein said server management terminal performs has control means for shifting a main frequency of the frequency band being used by the wireless communication system or reducing an occupied bandwidth and updating the frequency band information on the wireless communication system in said frequency band information memory when it is requested to change the frequency band from a server management terminal of any of the other adjacent wireless communication systems.

17. (Currently amended) [[A]] The wireless communication system according to claim 16, wherein said control means notifies a client terminal connected to said server radio station of the change in the frequency band when the frequency band information on the wireless communication system is updated.

18. (Currently amended) [[A]] The wireless communication system according to claim 9, wherein said server management terminal performs the allocation of the band such that the frequency bands used by the wireless communication system and a plurality of the other wireless communication systems are not adjacent to each other.

19. (Withdrawn) A method for allocating a frequency band of a wireless communication system, the method comprising the steps of:

searching, within a predetermined frequency region divided into a plurality of frequency bands having different reference frequencies with each other, the reference frequencies currently used by other wireless systems located in the surroundings and creating a reference frequency table indicative of relationships between the reference frequencies and use situations thereof;

acquiring information on an occupied bandwidth in use from each of the other wireless communication systems located in a communicative range and creating a band-in-use management table indicative of a relationship between the occupied bandwidth and a main frequency thereof for each of the wireless communication systems;

creating an idle band management table indicative of relationships between groups of idle state reference frequencies adjacent to each other and idle frequency bands composed of the respective groups of the idle state reference frequencies based on said reference frequency table and said band-in-use management table; and

detecting one of the idle frequency bands adapted to an occupied band to be allocated to the wireless communication system from said idle band management table, and deciding a main frequency of said occupied band from among the reference frequencies in the detected idle frequency band.

20. (Withdrawn) A method according to claim 19, further comprising the step of narrowing the width of the occupied band to be allocated if the width of the occupied band is changeable when there is no idle frequency band adapted to the occupied band, wherein an idle frequency band adapted to the narrowed occupied band is detected in said main frequency deciding step.